3.   (THREE TIMES AMENDED) A data controller, that is couplable to a host and coupled to a storage medium, microprocessor, local storage and a buffer memory, comprising a command queuing engine that creates a plurality of threads of sequential commands that exist simultaneously while minimizing interrupts associated to the commands.

16.   The data controller of claim 3 wherein the command queueing engine includes a transfer extend generator that generates transfer extend entries.

17.   The data controller of claim 16 wherein the transfer extend generator is coupled to the buffer memory to store the transfer extend entries.

18.   The data controller of claim 3 wherein the command queuing engine includes a data retrieval channel.

19.   The data controller of claim 18 wherein the command queueing engine further includes a status retrieval channel.

20.   The data controller of claim 18 wherein the data retrieval channel is coupled to the buffer memory to retrieve transfer extend entries and to return used read pointers.

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